

ATTY. DOCKET NO.: SU-7190-A

SERIAL NO.: 10/688,124

APPLICANT: JONATHAN N. HOWARTH ET AL.

FILING DATE: October 17, 2003

GROUP:

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
M	US-1	2	1	3	0	8	0	5	09-20-1938	Levine			
	US-2	2	3	9	2	5	0	5	01-8-1946	Rogers			
	US-3	2	3	9	8	5	9	8	04-16-1946	Rogers			
	US-4	2	7	7	9	7	6	4	01-29-1956	Paterson			
	US-5	2	7	9	5	5	5	6	06-11-1957	Quinn			
	US-6	2	8	6	8	7	8	7	01-13-1959	Paterson			
	US-7	2	9	2	0	9	9	7	01-12-1960	Wolf et al.			
	US-8	2	9	7	1	9	5	9	02-14-1961	Waugh et al.			
	US-9	2	9	7	1	9	0	0	02-14-1961	Waugh et al.			
	US-10	3	1	2	1	7	1	5	02-18-1964	Waugh et al.			
	US-11	3	1	4	7	2	5	9	09-01-1964	Paterson			
	US-12	3	3	4	5	3	7	1	10-03-1967	Paterson			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
M	FP-1	1	2	3	0	8	2	5	12-29-1987	Canada				
	FP-2	2	0	4	2	4	3	0	11-30-1991	Canada				
	FP-3	2	1	6	3	5	9	6	09-04-1996	Canada				
	FP-4	0	1	7	7	6	4	5	04-16-1986	EPO				
	FP-5	0	2	0	6	7	2	5	12-30-1986	EPO				
	FP-6	0	2	2	8	5	9	3	07-15-1987	EPO				
	FP-7	0	5	8	1	8	2	6	02-09-1994	EPO				

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M	L-1	Corral et al., "Substitution in the Hydantoin Ring. III. Halogenation", J. Org. Chem., 1963, Vol. 28, ppg. 1100-1104.
	L-2	Jolles, "General Methods of Bromination", Bromine and its Compounds, 1966, Ernest Benn, London, ppg. 365.
	L-3	Markish et al., "New Aspects on the Preparation of 1,3-Dibromo-5,5-Dimethylhydantoin", Ind. Eng. Chem. Res. 1995, Vol. 34, ppg. 2125-2127.
	L-4	Orazi et al., "Halogenacion con 3-Bromo-5,5-Dimetil-Hidantoina", Anales Assoc. Quim. Argentina, 1949, Vol. 37, ppg. 192-196. (Not translated)
	L-5	Orazi et al., "Halogenacion Con 1-3-Dibromo-5,5-Dimetil-Hidantoina", Anales Assoc. Quim. Argentina, 1950, Vol. 38, ppg. 5-11. (Not translated)
	L-6	Gottarai: Reaction of Cl Br - In Aqueous solution (76 Zeutralks. Bakteriell., Parasiteukd.,) In Fektiionskr. Hyg., Abt. 1: Orig., Geihe B 162 (3-4), 384-8.

EXAMINER

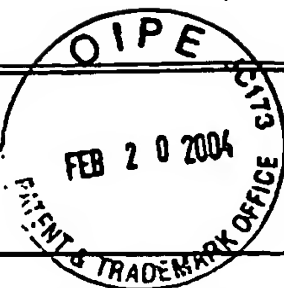
Mr. O. Long

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1/2/07

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FORM PTO-1449 (Modified)
LIST OF PATENTS AND PUBLICATIONS FOR
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MP	US-13	3	6	2	6	9	7	2	12-14-1971	Lorenzen			
	US-14	4	0	7	8	0	9	9	03-07-1978	Mazzola			
	US-15	4	1	1	9	5	3	5	10-10-1978	White et al.			
	US-16	4	1	2	6	7	1	7	11-21-1978	Mazzola			
	US-17	4	1	3	6	0	5	2	01-23-1979	Mazzola			
	US-18	4	1	9	9	0	0	1	04-22-1980	Kratz			
	US-19	4	2	4	2	2	1	6	12-30-1980	Daugherty et al.			
	US-20	4	2	7	0	5	6	5	06-02-1981	King, Sr.			
	US-21	4	2	9	3	4	2	5	10-06-1981	Price			
	US-22	4	3	2	7	1	5	1	04-27-1982	Mazzola			
	US-23	4	3	3	1	1	7	4	05-25-1982	King, Sr.			
	US-24	4	4	2	7	6	9	2	01-24-1984	Girard			
	US-25	4	4	6	5	8	3	9	08-14-1984	Schulte et al.			
	US-26	4	5	3	2	3	3	0	07-30-1985	Cole			
	US-27	4	5	3	7	6	9	7	08-27-1985	Girard			
	US-28	4	5	6	0	7	6	6	12-24-1985	Girard et al.			
	US-29	4	5	7	1	3	3	3	02-18-1986	Hsiao et al.			
	US-30	4	5	9	7	9	4	1	07-01-1986	Bottom et al.			
	US-31	4	6	2	1	0	9	6	11-04-1986	Cole			
	US-32	4	6	5	4	4	2	4	03-31-1987	Girard et al.			
	US-33	4	6	5	9	3	5	9	04-21-1987	Lorenz et al.			
	US-34	4	6	6	2	3	8	7	05-05-1987	King, Sr.			

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		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
MP	FP-8	1	0	5	4	2	4	3	01-1967	Great Britain				
	FP-9	1	6	0	0	2	8	9	10-14-1981	United Kingdom				
	FP-10	2	2	7	3	1	0	6	06-08-1994	Great Britain				
	FP-11	56	1	5	8	3	3	3	12-07-1981	Japan			X	
	FP-12	7	2	9	9	4	6	8	11-14-1995	Japan			X	

OTHER ENCLOSED DOCUMENTS

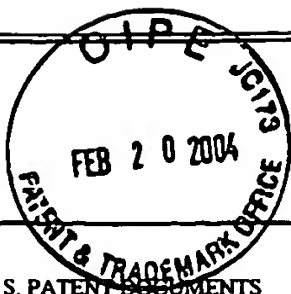
MP	L-7	March, "Advanced Organic Chem.", 1992, 4 th Edition, pp. 639-640
	L-8	HCAPLUS Abstract of JP 07171576 A2 issued 1995.
	L-9	HCAPLUS Abstract of JP 07277912 A2 issued 1995.
	L-10	HCAPLUS Abstract of JP 08027119 A2 issued 1996.

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M	US-35	4	6	7	7	1	3	0	06-30-1987	Puzig			
	US-36	4	6	9	8	1	6	5	10-06-1987	Theyson			
	US-37	4	7	1	3	0	7	9	12-15-1987	Chun et al.			
	US-38	4	7	2	8	4	5	3	03-01-1988	Choy			
	US-39	4	7	4	5	1	8	9	05-17-1988	Lee et al.			
	US-40	4	7	8	0	1	9	7	10-25-1988	Schuman			
	US-41	4	8	0	3	0	7	9	02-07-1989	Hsiao et al.			
	US-42	4	8	6	7	8	9	5	09-19-1989	Choy			
	US-43	4	9	1	9	8	4	1	04-24-1990	Kamel et al.			
	US-44	4	9	2	5	8	6	6	05-15-1990	Smith			
	US-45	5	0	7	6	3	1	5	12-31-1991	King			
	US-46	5	2	1	8	9	8	3	06-15-1993	King			
	US-47	5	3	3	8	4	6	1	08-16-1994	Jones			
	US-48	5	3	3	9	8	8	9	08-23-1994	Bigham			
	US-49	5	3	8	4	1	0	2	01-24-1995	Ferguson et al.			
	US-50	5	4	2	2	1	2	6	06-06-1995	Howarth et al.			
	US-51	5	4	7	6	1	1	6	12-19-1995	Price et al.			
	US-52	5	5	6	5	1	0	9	10-15-1996	Sweeny			
	US-53	5	5	6	5	5	7	6	10-15-1996	Hall et al.			
	US-54	5	5	7	8	5	5	9	11-26-1996	Dolan et al.			
	US-55	5	5	9	1	6	9	2	01-07-1997	Jones et al.			
	US-56	5	6	0	3	9	4	1	02-18-1997	Farina et al.			

FOREIGN PATENT DOCUMENTS

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M	FP-13	8	9	1	0	6	9	6	11-16-1989	WIPO				
	FP-14	9	6	3	0	4	9	1	10-03-1996	WIPO				
	FP-15	9	7	1	5	6	5	2	05-01-1997	WIPO				
	FP-16	9	7	4	3	2	6	4	11-20-1997	WIPO				

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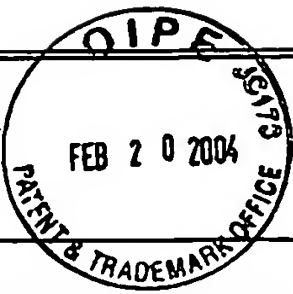
M	L-11		Chowhan et al., "Hardness Increase Induced by Partial Moisture Loss in Compressed Tablets and Its Effect on In Vitro Dissolution", J. Pharm. Sciences, October 1978, Vol. 67, No. 10, ppg. 1385-1389.										
	L-12		Krycer et al., "An Evaluation of Tablet Binding Agents Part II. Pressure Binders", Powder Technology, 1983, Vol. 34, ppg. 53-56.										
	L-13		Pettersen, "N-Halogen Compounds. I. Decomposition of 1,3-Dichloro-5,5-dimethylhydantoin in Water at pH 9", J. Org. Chem., 1959, Vol. 24, ppg. 1414-1419.										

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M	US-57	5	6	1	0	1	2	6	03-11-1997	Barford et al.			
	US-58	5	6	1	4	5	2	8	03-25-1997	Jones et al.			
	US-59	5	6	7	0	4	5	1	09-23-1997	Jones et al.			
	US-60	5	7	5	0	0	6	1	05-12-1998	Farina et al.			
	US-61	5	7	5	3	6	0	2	05-19-1998	Hung et al.			
	US-62	5	7	5	6	4	4	0	05-26-1998	Watanabe et al.			
	US-63	5	7	6	3	3	7	6	0609-1998	Ward et al.			
	US-64	5	7	8	0	6	4	1	07-14-1998	Yerushalmi et al.			
	US-65	5	8	5	9	0	6	0	01-12-1999	Plant			
	US-66	5	9	4	2	1	5	3	08-24-1999	Heydel			
	US-67	5	9	5	8	8	5	3	09-28-1999	Watanabe			
	US-68	5	9	7	2	8	6	4	10-26-1999	Counts			
	US-69	5	9	8	1	4	6	1	11-09-1999	Counts et al.			

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M	FP-17	0	0	3	4	1	8	6	06-15-2000	WIPO				
	FP-18	9	7	2	0	5	4	6	06-12-1997	WIPO				
	FP-19	9	7	2	0	9	0	9	06-12-1997	WIPO				
	FP-20	9	7	4	3	3	9	2	11-20-1997	WIPO				

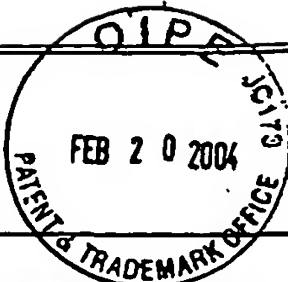
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M	L-14		HCAPLUS Abstract of JP 08239699 A2 issued 1996.										
	L-15		HCAPLUS Abstract of JP 09087684 A2 issued 1997.										
	L-16		HCAPLUS Abstract of JP 09227317 A2 issued 1997.										
	L-17		Author unknown, "Big Brother Brominator - Brominators", Bulky Systems Website, < http://www.bulkysystemsinc.com/brominator.html > (Visited August 10, 2001). 1 page.										
	L-18		Author unknown, "Big Brother Brominator - Brominators", Bulky Systems Website, < http://www.bulkysystemsinc.com/brominator.html > (Visited August 10, 2001). 1 page.										
	L-19		Author unknown, "Bio Lab Brominator", Conely Company Website, < http://www.conelyco.com/Pool-Spa/parts/biobrom.htm > (Visited August 10, 2001) 2 pages.										
	L-20		Hayward America's #1 Pool Water Systems Product Catalog, "Automatic Chemical Feeders" "Chlorinators (Slow Dissolve Tri-Chlor Only) and Brominators, Hayward Pool Products Inc. Website, < http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=61 > , 2 pages.										
V	L-21		Author unknown, "Bio Lab Brominator", Conely Company Website, < http://www.conelyco.com/Pool-Spa/parts/biobrom.htm > (Visited August 10, 2001) 2 pages.										

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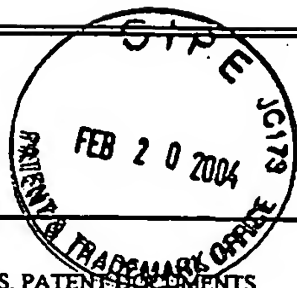
	L-22	Hayward Pool Products Owner's Guide, Installation and Operating Instructions, "Hayward Chemical Feeder", Models C250CF, C500CF, C1100CF, C1800CF, C2400CF, - 1998 - 4 pages
	L-23	Hayward America's #1 Pool Water Systems Product Catalog, "Automatic Chemical Feeders" "Chlorinators (Slow Dissolve Tri-Chlor Only) and Brominators, Buyers Guide, Hayward Pool Products Inc., Website, <http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=60>, 2 pg
	L-24	Pentair Pool Products Brochure, "Rainbow High Capacity Chlorine/Bromine Feeders", "Unsurpassed Performance From The Industry's Leader in Automatic Sanitizing of Large Residential and Commercial Pools", date unknown, 1 page.
	L-25	Hayward America's #1 Pool Water Systems Product Catalog, "Automatic Chemical Feeders" "Chlorinators (Slow Dissolve Tri-Chlor Only) and Brominators, Hayward Pool Products Inc. Website, <http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=61>, 2 pages.
	L-26	Hayward Pool Products Owner's Guide, Installation and Operating Instructions, "Hayward Chemical Feeder", Models C250CF, C500CF, C1100CF, C1800CF, C2400CF, - 1998 - 4 pages
	L-27	Hayward America's #1 Pool Water Systems Product Catalog, "Automatic Chemical Feeders" "Chlorinators (Slow Dissolve Tri-Chlor Only) and Brominators, Buyers Guide, Hayward Pool Products Inc., Website, <http://www.haywardnet.com/products/catalog/displayProdInfo.cfm?itemID=60>, 2 pg
	L-28	Pentair Pool Products Brochure, "Rainbow Model 300 Automatic Chlorine/Bromine Off-line Feeders", "The Efficient, Easy Way to Sanitize Your Pool or Spa", date unknown, 1 page.
	L-29	Pentair Pool Products Brochure, "Rainbow Model 320 Automatic Chlorine/Bromine In-line Feeder", "Saves Time, Reduces Manual Handling of Chemicals", date unknown, 7 pages.
	L-30	Sani-King Perform-Max Pool Sanitizer Instruction Guide, Models 910, 940, & 980 (Inline) and Models 930 & 960 (Off-line), date unknown, 16 pages.
	L-31	Pentair Pool Products Brochure, "Rainbow High Capacity Chlorine/Bromine Feeders", "Unsurpassed Performance From The Industry's Leader in Automatic Sanitizing of Large Residential and Commercial Pools", date unknown, 1 page.

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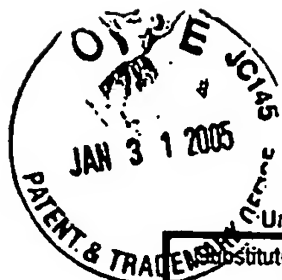
OTHER ENCLOSED DOCUMENTS

M ↓	L-32	Sani-King Spa Feeder Product Brochure Model 740 from King Technology Website, < http://www.kingtechnology.com/spafeeder.htm > Visited (August 10, 2001), 2000, 4 pages.
	L-33	Sani-King Adjust-A-Flo Product Brochure from King Technology Website < http://www.kingtechnology.com/spafeeder.htm > (Visited August 10, 2001), 2000, 1 page.
	L-34	Sani-King Perform-Max Sanitizers for Inground Pools Product Brochure for Model 940 & 960 from King Technology Website, < http://www.kingtechnology.com/perfermaxIG.htm > , visited August 10, 2001, 2000, 1 page
	L-34	Sani-King Perform-Max Sanitizers for Above Ground Pools Product Brochure Model 910 & 930 from King Technology Website, < http://www.kingtechnology.com/perfermaxIG.htm > , visited August 10, 2001, 2000, 1 page
	L-36	Discount Pool & Spa Supplies, Automatic Chlorinators and Chemical Feeders Website, < http://www.discountpoolsupplies.com/Chemfeeders/ > Visited August 10, 2001, 3 pages.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT First Supplemental (use as many sheets as necessary)		Complete if Known	
		Application Number	10/688,124
		Filing Date	October 17, 2003
		First Named Inventor	Jonathan N. Howarth
		Group Art Unit	—
		Examiner Name	—
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		Attorney Docket Number	SU-7190-A

U.S. PATENT DOCUMENTS					
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		Number-Kind Code ² (if known)			
✓	US-89	US-5683654	11-04-1997	Dallmier et al.	
	US-90	US-5795487	08-18-1998	Dallmier et al.	
	US-91	US-5808089	09-15-1998	Worley et al.	
	US-92	US-5889130	03-30-1999	Worley et al.	
	US-93	US-5902818	05-11-1999	Worley et al.	
	US-94	US-5942126	08-24-1999	Dallmier et al.	
	US-95	US-6007726	12-28-1999	Yang et al.	
	US-96	US-6068861	05-30-2000	Moore, Jr. et al	
	US-97	US-6110387	08-29-2000	Choudhury et al.	
	US-98	US-6123870	09-26-2000	Yang et al.	
✓	US-99	US-6156229	12-05-2000	Yang et al.	
	US-100	US-6270722 B1	08-07-2001	Yang et al.	
	US-101	US-6284144 B1	09-04-2001	Itzhak	
	US-102	US-6287473 B1	09-11-2001	Yang et al.	
	US-103	US-6322822 B1	11-27-2001	Moore Jr., et al.	
	US-104	US-6448410 B1	09-10-2002	Howarth et al.	
	US-105	US-6495698 B1	12-17-2002	Howarth	
	US-106	US-6508954 B1	01-21-2003	Elnagar et al.	
	US-107	US-6565868 B1	05-20-2003	Howarth et al.	
	US-108	US-6638959 B2	10-28-2003	Howarth et al.	
✓	US-109	US-6680070 B1	01-20-2004	Howarth et al	

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				

Examiner Signature	<i>Mark L. [Signature]</i>	Date Considered	1/21/07
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT First Supplemental (use as many sheets as necessary)		Complete if Known			
		Application Number	10/688,124		
		Filing Date	October 17, 2003		
		First Named Inventor	Jonathan N. Howarth		
		Group Art Unit	—		
		Examiner Name	—		
Sheet	1	of	4	Attorney Docket Number	SU-7190-A

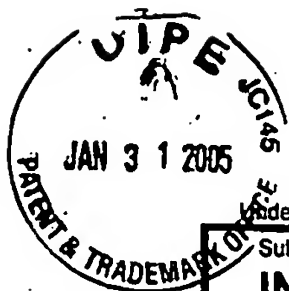
U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
✓	US-70	US-3147219	09-01-1964	Paterson	
	US-71	US-4382799	05-10-1983	Davis et al.	
	US-72	US-4642194	02-10-1987	Johnson	
	US-73	US-4681948	07-21-1987	Worley	
	US-74	US-4711724	12-08-1987	Johnson	
	US-75	US-4767542	08-30-1988	Worley	
	US-76	US-4883600	11-28-1989	MacDonald et al.	
	US-77	US-4929424	05-29-1990	Meier et al.	
	US-78	US-4964892	10-23-1990	Hsu	
	US-79	US-4966716	10-30-1990	Favstritsky et al.	
	US-80	US-4995987	02-26-1991	Whitekettle et al.	
	US-81	US-5057612	10-15-1991	Worley et al.	
	US-82	US-5208057	05-04-1993	Greenley et al.	
	US-83	US-5264136	11-23-1993	Howarth et al.	
	US-84	US-5464636	11-07-1995	Hight et al.	
	US-85	US-5490983	02-13-1996	Worley et al.	
✓	US-86	US-5527547	06-18-1996	Hight et al.	
	US-87	US-5622708	04-22-1997	Richter et al.	
	US-88	US-5670646	09-23-1997	Worley et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
✓	FP-21	GB- 1139188	01-08-1969	Padilla		
	FP-22	WO- 8802987	05-05-1988	Great Lakes		
	FP-23	WO- 9015780 A1	12-27-1990	Rakestraw et al.		
	FP-24	WO- 9932596 A1	07-01-1999	Rees et al.		
	FP-25	WO- 9955627 A1	11-04-1999	Yang et al.		
	FP-26	WO- 0153209 A2	07-26-2001	Albemarle Corp.		

Examiner Signature	<i>Michael Lee</i>	Date Considered	12/1/07
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Substitute for form 1449/PTO		Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT First Supplemental (use as many sheets as necessary)		Application Number	10/688,124	
		Filing Date	October 17, 2003	
		First Named Inventor	Jonathan N. Howarth	
		Group Art Unit	---	
		Examiner Name	---	
3	of	4	Attorney Docket Number	SU-7190-A

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	L-37	Carr, Anita C., "Differential reactivities of hypochlorous and hypobromous acids with purified Escherichia coli phospholipid: formation of haloamines and halohydrins", Biochimica et Biophysica, 1392, 1998, ppg 254-264.	
	L-38	Hawkins, Clare L., et al., "Hypochlorite- and Hypobromite-Mediated Radical Formation and Its Role in Cell Lysis", Archives of Biochemistry and Biophysics, vol 395, no. 2, November 15, 2001, ppg 137-145.	
	L-39	Howarth, J.N., et al. "A New, Bromine-Releasing Solid for Microbiological Control of Cooling Water", IWC-01-05, (Pittsburgh, PA: Engineers' Society of Western Pennsylvania, 2001), ppg 1-7.	
	L-40	Kumar, Krishan, et al., "Kinetics and Mechanism of General-Acid-Assisted Oxidation of Bromide by Hypochlorite and Hypochlorous Acid", Inorg. Chem., 1987, vol 26, ppg 2706-2711.	
	L-41	Mantilla-Sandholm et al., "Biofilm Formation in the Industry: A Review", Food Reviews International, 8(4), 1992, ppg 573-603.	
	L-42	Nalepa, C.J., "New Bromine-Releasing Granules for Microbiological Control of Cooling Water," paper 03716 (Corrosion 2003 Houston, TX: NACE International, 2003), ppg 03716/1-03716/15.	
	L-43	Nalepa, C.J., et al., "Strategies for Effective Control of Surface-Associated Microorganisms: A Literature Perspective," IWC-02-01 (Pittsburgh, PA: Engineers' Society of Western Pennsylvania, 2002), 19 pgs.	
	L-44	Nalepa, C.J., H. Ceri, and C.A. Stremick, "A Novel Technique for Evaluating the Activity of Biocides Against Biofilm Bacteria," paper 00347 (Corrosion 2000, Houston, TX: NACE International, 2000), ppg 00347/1 - 00347/19.	
	L-45	Nalepa, C.J., et al., "The Activity of Oxidizing Biocides towards Legionella pneumophila and the Impact of Biofilms on its Control," paper 01278 (Houston, TX: NACE International, 2001, 21 pages.	
	L-46	Nalepa, C.J., et al., "The Control of Bacteria on Surfaces: Effectiveness of Bromine-Based Biocides towards Microbial Biofilms and Biofilm-Associated Legionella pneumophila," paper TP02-13 (Houston, TX: Cooling Technology Institute, 2002), 22 pages.	

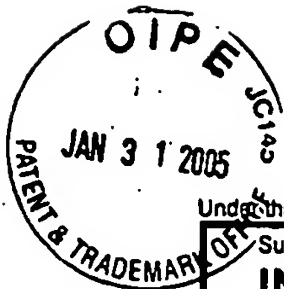
Examiner Signature		Date Considered	1/24/07
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Substitute for form 1449/PTO		Complete if Known			
INFORMATION DISCLOSURE STATEMENT BY APPLICANT First Supplemental (use as many sheets as necessary)		Application Number	10/688,124		
		Filing Date	October 17, 2003		
		First Named Inventor	Jonathan N. Howarth		
		Group Art Unit	---		
		Examiner Name	---		
	4	of	4	Attorney Docket Number	SU-7190-A

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
M	L-47	Nalepa, C.J., et al., "Case Study: A Comparison of Bromine-Based Biocides in a Medium-Size Cooling Tower," paper TP98-09 (Houston, TX: Cooling Tower Institute, 1998), 22 pages.	
	L-48	Nalepa, C.J., J.N. Howarth, and F.D. Azarnia, "Factors to Consider When Applying Oxidizing Biocides in the Field," paper 02223 (Houston, TX: NACE International, 2002), 20 pages.	
	L-49	Nalepa, C.J., "25 Years of Bromine Chemistry in Industrial Water Systems: A Review", paper 04087 (NACE International 2004), 30 pages.	
	L-50	Vissers, Margret C.M., et al., "Comparison of human red cell lysis by hypochlorous and hypobromous acids: Insights into the mechanism of lysis", Biochem. J., vol 330, 1998, ppg 131-138.	
	L-51	Vissers, Margret C.M., et al., "Fatty acid chlorohydrins and bromohydrins are cytotoxic to human endothelial cells", Redox Report, vol 6, no. 1, 2001, ppg 49-55.	

Examiner Signature	<i>McD</i>	Date Considered	9/24/07
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Second Supplemental
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Sheet

1

of

1

Application Number

10/688.124

Filing Date

October 17, 2003

First Named Inventor

Jonathan N. Howarth

Group Art Unit

Examiner Name

Attorney Docket Number

SU-7190-A

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

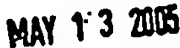
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Substitute for form 1449A/PTO

Third Supplemental
(use as many sheets as necessary)

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Application Number	10/688,124
Filing Date	October 17, 2003
First Named Inventor	Jonathan N. Howarth
Group Art Unit	—
Examiner Name	—
Attorney Docket Number	SU-7190-A

Sheet	1	of	2
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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³ -Number ⁴ - Kind Code ⁵ (if known)				
M	FP-28	JP 56-53602	05-13-1981	Chiyoda Kagaku Kenkyusho K.K.		X
	FP-29	JP 62-270506	11-24-1987	Kurita Water Industries, Ltd.		X
H	FP-30	RU 277157	07-22-1970	Scientific Research		X

Examiner Signature	<i>Arnell Lewis</i>	Date Considered	11/21/07
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Examiner Signature	<i>[Signature]</i>	Date Considered	12/1/07
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